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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,289	12/20/2000	Richard D. Romero	042933/274313	6983
826	7590	08/10/2007	EXAMINER	
ALSTON & BIRD LLP			BURGESS, BARBARA N	
BANK OF AMERICA PLAZA				
101 SOUTH TRYON STREET, SUITE 4000			ART UNIT	
CHARLOTTE, NC 28280-4000			PAPER NUMBER	
			2157	
			MAIL DATE	
			DELIVERY MODE	
			08/10/2007	
			PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/745,289	<b>Applicant(s)</b> ROMERO ET AL.	
	<b>Examiner</b> Barbara N. Burgess	<b>Art Unit</b> 2157	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-14,16-18 and 20-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-14,16-18 and 20-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is in response to amendment filed May 9, 2007. Claims 1-2, 5-14, 16-18, 20-53 are presented for further examination.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 5-14, 16-18, 20-25, 30-53 are rejected under 35 U.S.C. 103(a) as unpatentable over Ozzie et al. (hereinafter "Ozzie", US Patent 6,941,510 B01) in view of Doerre et al. (hereinafter "Doe", US Patent 6,446,061 B1).

As per claim 1, Ozzie discloses a method, apparatus, and machine-readable program comprising:

- Receiving a machine readable file containing a document that is to be served to a client for display on a client device, the organization of the documents in the file being expressed as a hierarchy of information (column 5, lines 45-65, column 7, lines 55-67).
- Deriving subdocuments from the hierarchy of information by deriving comprises traversing the hierarchy and assembling the subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments, at least one of the subdocuments being expressed in a format that

permits it to be served separately to the client, at least one to the subdocuments containing information that enables it to be linked to another one of the subdocuments (column 11, lines 1-20).

Ozzie does not explicitly disclose:

- Wherein the assembling of the subdocuments conforms to an algorithm that tends to balance the respective sizes of the subdocuments.

However, in an analogous art, Doe discloses a taxonomy of more than 70,000 news documents having 6 levels to visualize different aspects contained in the clusters. The size of the leaf nodes is well-balanced (column 20, lines 31-42).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Doe's assembling the subdocuments conforms to an algorithm that tends to balance the respective sizes of the subdocuments in Ozzie's method in order for different topics to be found in such a large selection of data.

As per claims 2, 16, Ozzie discloses the method of claim 1 in which the hierarchical expression language comprises extensible mark-up language (XML) (column 7, lines 56-67).

As per claim 5, Ozzie further discloses the method of claim 3 in which the assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from the segments that have common parents in the hierarchy (column 8, lines 5-15).

As per claim 6, Ozzie discloses the method of claim 3, in which the assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from segments for which replications of nodes in the hierarchy is not required (column 12, lines 8-15).

As per claim 7, Ozzie discloses the method of claim 1 in which the file is received from an origin server associated with the file (column 5, lines 59-67, column 6, lines 1-8).

As per claim 8, Ozzie discloses the method of claim 7 in which the file is expressed in a language that does not organize segments of the document in a hierarchy, and the deriving of subdocuments includes first converting the file to a language that organized segments of the document in a hierarchy (columns 6, lines 50-67, column 7).

As per claims 9, Ozzie discloses the method of claim 1 also including serving the subdocuments to the client individually as requested by the client (column 11, lines 8-13).

As per claims 10, 18, 22, Ozzie disclose the method of claims 9, 17, and 22 in which the subdocuments are served to the client using a hypertext transmission protocol (column 2, lines 5-15, column 10, lines 65-67).

As per claim 11, Ozzie discloses the method of claim 9 in which the subdocuments are requested by the client based on contained information that enables it to be linked to another of the subdocuments (column 11, lines 1-5).

As per claims 12, Ozzie discloses the method of claim 1 also including

- Identifying a portion of the document that is to be displayed separately from the rest of the document (column 44, lines 51-65);
- The portion of the document that is to be displayed separately being excluded from the subdocument in which the portion would otherwise have appeared, the portion of the document that is to be displayed separately being included in at least one corresponding subdocument (column 44, lines 44-51),
- When the subdocument in which the portion would otherwise have appeared is served to the client, embedding a graphical device that can be invoked by the user to retrieve the subdocument that contains the portion of the document that is to be displayed separately (column 11, lines 8-15).

As per claims 13, Ozzie discloses a method comprising:

- Receiving, from an origin server, a machine readable file containing a document that is to be served to a client for display on a client device, the file being expressed in a language that does not organize segments of the document in a hierarchy (column 6, lines 44-58);
- Converting the file to a language that organizes segments of the document in a hierarchy (column 7, lines 55-65)

- Traversing the hierarchy and assembling subdocuments from the segments, at least some of the subdocuments each being assembled from more than one of the segments, the assembling conforming to an algorithm that tends to (a) balance the respective sizes of the sub-documents, (b) favor assembling each of the subdocuments from segments that have common parents in the hierarchy, and (c) assemble the subdocuments from segments for which replications of nodes in the hierarchy is not required (column 8, lines 5-15).
- At least one of the subdocuments being expressed in a format that permits it to be served separately to the client, at least one of the subdocuments containing information that enables it to be linked to another one of the subdocuments (column 11, lines 8-15).
- Serving the subdocuments to the client individually as requested by the client based on the contained information that enables it to be linked to another of the subdocuments (column 11, lines 10-20).

As per claim 14, Ozzie discloses a machine-readable document held on a storage medium for serving to a client, the document being organized as a set of subdocuments, subdocuments containing information that enables the subdocument to be linked to another of the subdocuments, the information enabling the subdocument to be linked comprising a URL, the subdocuments comprising an assembly of segments of the document that are a part of a hierarchical expression of the document, the subdocuments being of approximately the same size (column 11, lines 1-25, column 44, lines 51-60).

As per claim 17, Ozzie discloses a method comprising:

- Receiving from a client a request for a document to be displayed on a client device (column 5, lines 59-67);
- Serving separately to the client a subdocument that represents less than all of the requested document, the subdocument containing information that links it to at least one other subdocument (column 11, lines 1-10);
- Receiving from the client an invocation of the link to the other subdocument, and serving separately to the client device the other subdocument (column 10, lines 57-65).

Ozzie does not disclose:

- The subdocuments being of essentially the same length.

However, in an analogous art, Doe discloses a taxonomy of more than 70,000 news documents having 6 levels to visualize different aspects contained in the clusters. The size of the leaf nodes is well-balanced (column 20, lines 31-42).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Doe's subdocuments being essentially the same length in Ozzie's method in order for different topics to be found in such a large selection of data.

As per claim 21, Ozzie discloses a method comprising:

- Receiving from a server at a client device, a subdocument of a larger document for display on the client device (column 8, lines 1-10);



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- Displaying the subdocument on the client device (column 5, lines 45-65);
- Receiving at the client device a request of a user to have displayed another subdocument of the larger document (column 6, lines 34-43);
- Receiving separately from the server at the client device, the other subdocument (column 6, lines 60-67);
- Displaying the other subdocument on the client device (column 5, lines 45-65).

Ozzie does not explicitly disclose:

- The subdocument being of substantially the same length.

However, in an analogous art, Doe discloses a taxonomy of more than 70,000 news documents having 6 levels to visualize different aspects contained in the clusters. The size of the leaf nodes is well-balanced (column 20, lines 31-42).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Doe's subdocuments being essentially the same length in Ozzie's method in order for different topics to be found in such a large selection of data.

As per claim 23, Ozzie does not explicitly disclose the method of claim 21 in which the request of the user is expressed as a URL (column 2, lines 5-15, column 10, lines 65-67).

As per claim 24, Ozzie discloses the method of claim 21 in which all of each of the subdocuments is displayed at one time on the client device (column 10, lines 58-65).

As per claim 25, Ozzie discloses the method of claim 21 in which less than all of each of the subdocuments is displayed on the client device at one time (column 10, lines 58-65).

As per claim 30, Ozzie discloses the method 1, 17, or 21 in which the subdocuments are derived from the document at the time of a request from the client device for the document (column 9, lines 21-35).

As per claim 31, Ozzie discloses the method of claim 30 in which the subdocuments are derived in a manner that is based on characteristics of the client device (column 9, lines 21-35)

As per claims 32-33, Ozzie discloses the method of claim 31 in which the characteristics of the client device are provided by the client in connection with the request (column 5, lines 45-65).

As per claim 34-36, Ozzie discloses method of claim 1, 17, or 21, in which the subdocuments are derived from the document before the client requests the document from the server (columns 5, lines 59-67).

As per claims 37-39, Ozzie disclose apparatus and machine-readable medium comprising at least one of the subdocuments containing information that enables it to be linked to another one of the subdocuments (column 11, lines 1-10).

Ozzie does not explicitly disclose:

- The subdocument being of substantially the same length.

However, in an analogous art, Doe discloses a taxonomy of more than 70,000 news documents having 6 levels to visualize different aspects contained in the clusters. The size of the leaf nodes is well-balanced (column 20, lines 31-42).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Doe's subdocuments being essentially the same length in Ozzie's method in order for different topics to be found in such a large selection of data

As per claim 40, Ozzie discloses the method of claim 7 in which the file comprises an electronic document (column 2, lines 5-15, column 10, lines 65-67)

As per claim 41, Ozzie discloses the method of claim 7 in which the file comprises an email file (column 2, lines 5-15, column 10, lines 65-67).

As per claim 42, Ozzie discloses the method of claim 7 in which the file is received from the origin sever in the form of a webpage (column 2, lines 5-15, column 10, lines 65-67).

As per claim 43, Ozzie discloses the apparatus of claim 37 in which the network server is configured to derive the subdocuments by traversing the hierarchy and assembling the subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments (column 8, lines 20-35)

As per claim 44, Ozzie discloses the apparatus of claim 37, in which the file is received from an origin server associated with the file (column 7, lines 13-33).

As per claim 45, Ozzie discloses the apparatus of claim 44 in which the file is expressed in a language that does not organize segments of the document in a hierarchy, and the network server deriving the subdocuments includes first converting the file to a language that organized segments for the document in a hierarchy (column 6, lines 44-65).

As per claim 46, Ozzie discloses the apparatus of claim 37, in which the network server is also configured to server the subdocuments to the client individually as requested by the client (column 11, lines 5-10).

As per claim 47, Ozzie discloses the apparatus of claim 37 in which the subdocuments are of essentially the same length (column 44, lines 40-55).

As per claim 48, Ozzie discloses the machine-readable program of claim 39 in which the machine-readable program is capable of configuring the machine to derive

the subdocuments by the traversing the hierarchy and assembling the subdocuments from the segments, at least some of the subdocuments each being assembled from more than one of the segments (column 7, lines 35-45).

As per claim 49, Ozzie discloses the machine-readable program of claim 39 in which the machine-readable program is capable of configuring the machine to also server the subdocuments to the client individually as requested by the client (column 11, lines 3-13).

As per claim 50, Ozzie discloses an apparatus comprising:

- A client device configured to receive and display a subdocument of a larger document for display, wherein the client device is also configured to receive a request of a user to have displayed another subdocument of the larger document (column 8, lines 23-35).

Ozzie does not explicitly disclose:

- The subdocument being of substantially the same length.

However, in an analogous art, Doe discloses a taxonomy of more than 70,000 news documents having 6 levels to visualize different aspects contained in the clusters. The size of the leaf nodes is well-balanced (column 20, lines 31-42).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Doe's subdocuments being essentially the same length in Ozzie's method in order for different topics to be found in such a large selection of data

As per claim 51, Ozzie discloses the apparatus of claim 50 in which the client device is configured to receive and display subdocuments that have been derived from a document in a manner that is based on characteristics of the client device, the client device having provided the characteristics in connection with a request (column 5, lines 55-67).

As per claim 52, Ozzie discloses the apparatus of claim 50 in which the client device is configured to receive and display subdocuments that have been derived from a document in a manner that is based on characteristics of the client device, the characteristics including at least one display capability of the client device (column 7, lines 33-45).

As per claim 53, Ozzie discloses the apparatus of claim 50 in which the client device comprises a mobile phone or personal digital assistant (column 45, lines 1-15).

3. Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozzie et al. (hereinafter "Ozzie", US Patent 6,941,510 B01) in view of Doerre et al. (hereinafter "Doe", US Patent 6,446,061 B1) and in further view of Shklar et al. (hereinafter "Shklar", US Patent No. 6,253,239 B1).

As per claim 26, Ozzie does not explicitly disclose a method displaying an icon with the subdocument and in response to invocation of the icon, fetching another subdocument of the document from a server.

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However, in an analogous art, Shklar discloses a set of objects are indicated by a stack of icons (column 6, lines 8-14).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Shklar's icons in Ozzie's method in order to represent a file stored.

As per claim 27, Ozzie discloses the method of claim 26 in which only a portion of each of the subdocuments is displayed at one time (column 44, lines 51-65).

As per claim 28, Ozzie discloses the method of claim 27 also including displaying an indication of the position of the currently displayed subdocument in a series of subdocuments that make up the document (column 11, lines 1-15).

As per claim 29, Ozzie discloses the method of claim 28 in which the indication includes the total number of subdocuments in the series and the position of the currently displayed document in the sequence (column 8, lines 1-10).

### ***Response to Arguments***

**The Office notes the following argument(s):**

- (a) Ozzie fails to teach or suggest that subdocuments are assembled to be of approximately the same size or of balanced sizes as claimed in the claimed invention.
- (b) Doerre is not a proper reference for use in combination with Ozzie since Doerre is not analogous art.

(c) Doerre is completely unrelated to a hierarchy of sub-documents as such clusters are comprised of whole documents and not subdocuments.

**In response to:**

(a) Ozzie is not referenced to teach or suggest this feature. Doerre is used to teach this feature.

(b) In response to applicant's argument that Doerre is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Doerre's assembling the subdocuments conforms to an algorithm that tends to balance the respective sizes of the subdocuments in Ozzie's method in order for different topics to be found in such a large selection of data. As well, the fan-out at each level of the hierarchy must be limited, the depth must be limited so it can fit on a typical screen in order that the browser can be used to browse the taxonomy. There is a separate routing task has been introduced to a technique to guarantee scalability for collection sizes and processing of documents (column 16, lines 14-19, 53-57).

(c) Doerre teaches information mining clustering to segment a document collection into subsets. Taxonomy is generated for subset of documents. The effect of clustering is to segment a document collection into subsets (column 3, lines 6-8, column 4, lines 38-40, column 12, lines 37-39).

Therefore, Doerre, indeed, teaches hierarchy of subdocuments.



***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N. Burgess whose telephone number is (571) 272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Ettinene can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barbara N Burgess  
Examiner  
Art Unit 2157

July 31, 2007

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100